



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,973	04/05/2004	Brian W. Cho	68.0476	2972
35204	7590	10/03/2007		
SCHLUMBERGER RESERVOIR COMPLETIONS 14910 AIRLINE ROAD ROSHARON, TX 77583			EXAMINER SMITH, MATTHEW J	
			ART UNIT 3637	PAPER NUMBER
			NOTIFICATION DATE 10/03/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

vsolis2@slb.com

Office Action Summary

Application No.

10/708,973

Applicant(s)

CHO ET AL.

Examiner

Matthew J. Smith

Art Unit

3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7,15-21,23-28,32-44,46-49,51-53 and 55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32-44,46-49,51-53 and 55 is/are allowed.
- 6) ☒ Claim(s) 1,2,7,15,16 and 21 is/are rejected.
- 7) ☒ Claim(s) 17-20 and 23-28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7, 16, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Saurenman et al. (3066739).

Saurenman et al. disclose a method usable with a well, comprising: deploying a spring 19 downhole; energizing the spring before running the spring downhole, Fig. 3, including twisting the spring to reduce a diameter of the spring while maintaining the spring at the same axial length and twisting the spring from a direction opposite from a direction defined by a helical orientation of the spring (col. 3, lines 60-67); causing the spring to radially expand using energy stored in the spring without transferring additional energy to the spring (Fig. 2); and twisting the spring consistent with a helical orientation of the spring.

This reference also discloses a method usable with a well, comprising: forming a helical groove in a tubular member 19 to form a spring that expands in the well to form an annular barrier, Fig. 2, and releasing energy stored in the spring to cause the spring to radially expand to form an annular barrier in the well without the spring receiving additional energy to aid the expansion, Fig. 3.

This reference further discloses an apparatus usable in a well, comprising: a spring 19 having a helical groove and energized before being run into the well, Fig. 3, and the spring radially expands to form an annular barrier in the well without receiving additional energy to aid the expansion, Fig. 2.

Art Unit: 3635

Claims 1, 2, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Henshaw et al. (1459368).

Henshaw et al. disclose a method usable with a well, comprising: deploying a coil spring 15 downhole; energizing the spring before running the spring downhole including twisting the spring to reduce a diameter of the spring while maintaining the spring at the same axial length and twisting the spring from a direction opposite from a direction defined by a helical orientation of the spring (page 1, line 65); causing the spring to radially expand using energy stored in the spring without transferring additional energy to the spring (page 2, line 1); and providing an elastomer sleeve 14a around the spring.

Allowable Subject Matter

Claims 32-44, 46-49, 51-53, and 55 are allowed.

Claims 17- 20 and 23-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments, see page 8, filed 10 August 2007, with respect to the rejection of claims 1, 2, 7, 9, and 15 under 35 U.S.C. 112, first paragraph have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further

Art Unit: 3635

consideration, new rejections are made in view of Saurenman et al. and Henshaw et al. The examiner contends the references inherently disclose enough information to surmise the release of stored energy in a twisted or wound spring to seal a borehole.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Smith whose telephone number is 571-272-7034. The examiner can normally be reached on T-F, 8-3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lanna Mai
Supervisory Patent Examiner
Art Unit 3637



MJS *MJS*
26 September 2007